# SUBMISSION INSTRUCTION NO. 1 PROCEDUREAL REQUIREMENTS FOR A NEW OR MODIFIED SOLID WASTE MANAGEMENT FACILITY (SWMF) PERMIT APPLICATION

Developed by:

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# **I. APPLICABILITY** [§410.A.4., 450, 460, 470, and 480, 9 VAC 20-81-10]

- A. *Solid Waste Disposal Facilities*: Applicants for a permit to operate a solid waste disposal facility, (i.e. a sanitary, CDD, or industrial landfill), are required to obtain a full solid waste permit as discussed in this Submission Instruction.
- B. Solid Waste Management Facilities: Applicants for a permit to operate a solid waste management facility (i.e. compost facility; solid waste transfer station; materials recovery facility; waste to energy, thermal treatment, or incineration facility; waste pile; or centralized waste treatment facility) will usually apply for a Permit-by-Rule as discussed in Submission Instruction No. 1A; however, this Submission Instruction provides details of the application to be submitted should the applicant desire or the Department require the applicant to apply for a full solid waste permit.

# **II. PRE-APPLICATION STEPS**

- A. *Pre-Application Meeting* A pre-application meeting can be used to identify potential regulatory requirements that may be applicable to the project and any changes to the project because of statute changes that are not reflected in the regulations. This meeting is also an opportunity to discuss any applicable guidance that has been published or is in draft form; to identify out of the ordinary or innovative design features or unique circumstances that require special consideration; to determine the need to obtain variances, exemptions, approval of alternates, or functionally equivalent design issues, in addition to discussing required permit fees, timelines for permit processing and input with respect to potential challenges, pitfalls or constraints that may be associated with the project. If the applicant wishes to set up a pre-application meeting, please contact the DEQ Regional Office responsible for the proposed location of the facility.
- B. *Public Participation Steps* [§10.1-1408.1, §15.2-2204, §15.2-2285, 9VAC20-81-10] *[Applicable only to new Sanitary Landfills or Transfer Stations]* The public comment steps must be completed prior to filing the notice of intent with the Department. Public notice and public hearings/meetings must be completed in accordance with the applicable provisions of Code of Virginia § 15.2-2204, § 15.2-2285 and § 10.1-1408.1. If the applicant is a local government or public authority, §10.1-1408.1.B.5 requires the formation of a citizen's advisory group. An example public notice is provided in <u>Appendix A.1.</u> of this Submission Instruction.
- C. Reservation of Disposal Capacity [§10.1-1408.1.B.6.; §450.B.5., 9 VAC 20-81-10] (Applicable only to privately owned sanitary landfills) Applicants should contact all localities of the Commonwealth to give notice that a landfill is planned and give the localities an opportunity to reserve airspace capacity in accordance with the needs outlined in each respective Solid Waste Management Plan (Code of Virginia §10.1-1411). Example notification letters and reservation capacity statements are provided in Appendix A.2. of this Submission Instruction.

- **III. NOTICE OF INTENT** [§450.B., 9 VAC 20-81-10] The notice of intent (NOI) initiates the permit application process and consists of the items discussed below. The NOI may be submitted by itself or may accompany the Part A Permit Application as discussed in Section IV.C.
  - A. *Cover Letter* [§450.B.1., 9 VAC 20-81-10] Submit a letter to the DEQ Regional Office Waste Program Manager describing the desired permit, the precise location of the proposed facility, and the intended use of the facility. The applicant shall provide area and site locations maps as attachments to this letter.
  - B. *Disclosure Statement* [Code of Virginia §10.1-1408.1 B.2 and C.; §450.B.2., 9 VAC 20-81-10] Provide a signed and notarized DEQ Form DISC-01 and DEQ Form DISC-02 for each key personnel identified on DISC-01. These forms are available on the DEQ Website and accessible through the following links:

DEQ Form DISC-01: <a href="http://www.deq.virginia.gov/waste/pdf/wstregs/formdisc01.pdf">http://www.deq.virginia.gov/waste/pdf/wstregs/formdisc01.pdf</a>
DEQ Form DISC-02: <a href="http://www.deq.virginia.gov/waste/pdf/wstregs/formdisc02.pdf">http://www.deq.virginia.gov/waste/pdf/wstregs/formdisc02.pdf</a>

The Disclosure Statement should identify those key personnel who have obtained a Waste Management Facility Operators License as required by the Code of Virginia §10.1-1408.2.B., which states all solid waste management facilities shall be operated under the direct supervision of a waste management facility operator licensed by the Board for Waste Management Facility Operators. Information on training and licensing can be found on the Board's website: <a href="http://www.dpor.virginia.gov/dporweb/was\_main.cfm">http://www.dpor.virginia.gov/dporweb/was\_main.cfm</a>.

C. *Local Government Certification* [Code of Virginia §10.1-1408.1 B.9; §450.B.3., 9 VAC 20-81-10] Provide a signed DEQ Form SW-11-1. This form is available on the DEQ Website and accessible through the following link: http://www.deq.virginia.gov/export/sites/default/waste/pdf/forms/localcert.pdf

[Code of Virginia §10.1-1408.1 B.3] If the proposed location is not governed by any county, city, or town zoning ordinance, the application shall provide a certification from the local governing body that it held a public hearing in accordance with Code of Virginia §15.2-2204.

- D. Public Participation Documentation [Code of Virginia §10.1-1408.1 B.4 and B.5; §450.B.4., 9 VAC 20-81-10] (Applicable only to new Sanitary Landfills or Transfer Stations) Provide a statement summarizing the steps taken by the applicant to seek public comments as described in Section II.B. above, in addition to providing a copy of the public notice and a record of the public meeting.
- E. *Disposal Capacity Guarantee* [Code of Virginia §10.1-1408.1.B.6.; §450.B.5., 9 VAC 20-81-10] Provide appropriate documentation corresponding to the type of proposed landfill.
  - 1. *{If the application is for a locality-owned and locality-operated sanitary landfill }*Provide a signed statement specifying the proposed sanitary landfill is locally-owned and locally-operated and will only accept waste generated within the member

- jurisdictions. An example statement is provided in <u>Appendix B.1.</u> of this Submission Instruction.
- 2. *(If the application is for a privately-owned sanitary landfill)* Provide a signed statement guaranteeing that sufficient disposal capacity will be available in the facility to enable localities within the Commonwealth to comply with their Solid Waste Management Plans developed pursuant to 9 VAC 20-81-130 and certifying that such localities will be allowed to contract for and reserve disposal capacity in the facility. Other documents such as a typical letter and a contract form that were sent to the localities as well as a list of the localities contacted should also be provided. An example statement is provided in <u>Appendix B.2.</u> of this Submission Instruction..
- 3. {If the application is for a CDD or industrial landfill} No statement is required.
- F. *Host Agreement or Discussion of Disposal Limits/Service Area* [Code of Virginia §10.1-1408.1 B.7. and B.8.; §450.B.6. and §450.B.7, 9 VAC 20-81-10] Provide appropriate documentation corresponding to the type of proposed landfill.
  - 1. {If the application is for a locality-owned and locality-operated sanitary landfill} Provide a Discussion of Disposal Limits/Service Area:
    - a. A discussion on the primary access routes vehicles will use to access the site and the volumes of daily traffic (number of vehicles) that will be traveling through the primary access routes. The traffic count should be consistent with the VDOT Adequacy Report required under 9 VAC 20-81-460.G. and must relate to the daily disposal limit.
    - b. The daily disposal limit, specified in either tons or cubic yards per day based on an anticipated waste density. (The typical density of municipal solid waste is 0.5 tons per cubic yard and CDD and industrial waste is 0.6 tons per cubic yard.)
    - c. The service area of the facility. The service area should match the information provided for the Disposal Capacity Guarantee (Section III.E. of this Submission Instruction).
  - 2. *{If the application is for a privately-owned sanitary landfill}* Provide a signed Host Agreement, DEQ Form SW-11-2. This form is available on the DEQ Website and accessible through the following link:
    - http://www.deq.virginia.gov/export/sites/default/waste/pdf/forms/localhacf.pdf
  - 3. (If the application is for a CDD or industrial landfill) No information is required.
- G. *Demonstration of Need* [Code of Virginia §10.1-1408.1.D.1.; §450.B.8., 9 VAC 20-81-10] Provide information supporting one of the following demonstrations.
  - 1. *(If demonstration is based on § 9 VAC 20-81-450.B.8.a)* Provide information and supporting documentation, as applicable, for each item requested under § 9 VAC 20-81-450.B.8.a.(1), (2), (3), (4), (5), (6), (7), (8), and (9), and § 10.1-1408.1.D.1(i), (ii),

- (iii), (iv), (v), and (vi). If a section does not apply to the proposed solid waste management facility, indicate so with reasonable explanations.
- 2. {If demonstration is based on § 9 VAC 20-81-450.B.8.b for SANITARY Landfill only} Provide a discussion that based on current or projected disposal rates, there is less than 10 years of disposal capacity remaining in the facility and information demonstrating either of the following:
  - a. The available disposal capacity for the state is *less than 20 years* according to the most current report, prepared and published by DEQ, based on the information or reports submitted to the DEQ by the facilities in the state pursuant to the Solid Waste Information and Assessment Program (SWIA) in § 9 VAC 20-81-80.

#### OR

- a. The available permitted disposal capacity is less than 20 years either in:
  - i. The planning region, or regions, immediately contiguous to the planning region of the host community, or
  - ii. The facilities within a 75 mile radius of the proposed facility.

Also, provide a discussion addressing the requirements of § 10.1-1408.1.D.1 so the Director can evaluate whether there is a need for the additional capacity.

H. SCC Certification [§450.B.10., 9 VAC 20-81-10] {This certification is not required for those facilities owned solely by governmental units} Provide certification from the State Corporation Commission that the business entity (both owner and operator, if separate) pursuing the solid waste management permit is a valid entity, authorized to transact its business in Virginia.

- **IV. PART A PERMIT APPLICATION** [§450.C. and 460, 9 VAC 20-81-10] The Part A Permit Application provides information essential for assessment of the site suitability for the proposed facility. According to § 9 VAC 20-81-450.C.1., the applicant shall provide three copies of the Part A Permit Application and the attachments specified in § 9 VAC 20-81-460. Please check with the DEQ Regional Office responsible for the proposed location of the facility to determine the number and format of copies desired.
  - A. *Application Form* [§460.A., 9 VAC 20-81-10] Provide a transmittal letter stating the type of facility proposed with a signed and certified DEQ Form SW PTA. Mark entries that do not pertain to the type of the permit being applied for with "N/A" rather than leaving them blank. The attachments as specified on the form, are discussed further below, and should be submitted in the order prescribed. This form is available on the DEQ Website and accessible through the following link:
    - http://www.deq.virginia.gov/export/sites/default/waste/pdf/forms/parta.pdf
  - B. *Permit Application Fee* [§450.C.1., 9 VAC 20-81-10; §60., 9 VAC 20-90-10] Submit a check, draft, or postal money order made payable to the Treasurer of Virginia for the required permit application fee in accordance with the Solid Waste Management Facility Permit Action Fees and Annual Fees regulation (9 VAC 20-90-10 *et seq.*) to DEQ Receipts Control, P.O. Box 1104, Richmond, Virginia 23218. Applications not accompanied by the proper fee or containing insufficient fees will not be considered complete and shall not be processed by the Department.
  - C. *PTA Attachments I through VIII* [§450.B., 9 VAC 20-81-10] The items specified as the first eight attachments to DEQ Form SW PTA are the documents required as part of the Notice of Intent specified in Section III. If the NOI was submitted prior to the Part A Application, provide complete NOI documents in their respective Attachments; otherwise, submit the required NOI documents as part of the Part A Application.
  - D. PTA Attachment IX: Key Map, Near-Vicinity Map, and Regional Map
    - 1. **Key Map** [§460.B., 9 VAC 20-81-10] Include one or more key maps delineating the general location of the proposed facility. The key map should be plotted on a seven and one-half minute United States Geological Survey topographical quadrangle. The quadrangle should be the most recent revision available and should include the name of the quadrangle, delineate the general location of the proposed facility, and show all important features within one (1) mile from the perimeter of the proposed facility boundary. An example map can be found in <u>Appendix C.1.a.</u> of this Submission Instruction.
    - 2. **Near-Vicinity Map** [§460.C., 9 VAC 20-81-10] The vicinity map shall have a minimum scale of 1 inch equals 200 feet and should delineate an area of 500 feet from the perimeter of the property line of the proposed facility. The vicinity map may be produced with a reduced scale if it does not fit on one sheet, and then multiple sheets may be used to meet the minimum scale requirement. The map shall depict the following:
      - All homes, buildings or structures including the layout of the buildings which will

- comprise the proposed facility;
- The surveyed property boundary, facility boundary, and waste management boundary, and the acreages within those boundaries;
- The disposal unit boundary within the boundaries of the proposed facility;
- Lots and blocks from the tax map for the proposed facility and all adjacent properties;
- The base floodplain or a note indicating the expected flood occurrence period for the area; include the source of data (Federal Insurance Administration Map) or calculations.
- Existing land uses and zoning classifications;
- All water supply wells, springs or intakes, both private and public;
- All utility lines, pipelines or land-based facilities (e.g., mines or wells); and
- All parks, recreation areas, surface water bodies, dams, historic areas, wetlands, monuments, cemeteries, wildlife refuges, unique natural areas, or similar features.

An example map can be found in Appendix C.1.b. of this Submission Instruction.

- 3. **Regional Map** [\$120.C.3., 120.I., and 460.H., 9 VAC 20-81-10] *{Applicable only to sanitary landfills}* Provide a map identifying the following features within one (1), three (3) and five (5) miles of the proposed waste management boundary.
  - Existing surface or groundwater public water intakes or reservoirs;
  - Any impounding structures (dams)
  - Sinkholes or other features associated with karst terrain.
  - Airports;
  - Park and recreational areas;
  - Wildlife management areas;
  - Marine resources;
  - Wetlands:
  - Historic Sites;
  - Fish and Wildlife; and
  - Tourism Opportunities.

An example map can be found in Appendix C.1.c. of this Submission Instruction.

- E. *PTA Attachment X: Proof of Ownership Documents* [§460.D., 9 VAC 20-81-10] Provide a copy of deed, lease, or other certification of ownership of the proposed site.
- F. *PTA Attachment XI: Hydrogeologic and Geotechnical Report* [§460.E., 9 VAC 20-81-10]

{If the application is for a solid waste disposal facility regulated under Part III (9 VAC 20-81-100 et seq.)} Submit a site hydrogeologic and geotechnical report certified by a professional geologist or professional engineer registered for practice in the Commonwealth. The following format is provided to ensure all regulatory requirements are addressed in the report.

Format The format used for the Hydrogeologic and Geotechnical Report should encourage clear analysis and presentation of the site hydrogeologic and geotechnical investigations completed to determine site suitability for a solid waste disposal facility. The Report should start with a title page and table of contents followed by the following sections and discussions. The title page should identify the facility name and permit number, the permit applicant, document date, and document preparer information. In addition, the header or footer of each page should include the facility name, permit number, document title, revision date, and page number.

I. Purpose and Methods [§460.E.1., 9 VAC 20-81-10] The purpose of the report is to accomplish two tasks: (1) definition of the geology beneath the site area with an assessment of the availability and suitability of on-site soils for use in constructing the proposed landfill and (2) identification of the groundwater flow paths and rates of the uppermost aquifer. A variety of investigatory techniques/methods have been used during the se activities for collecting information and data is discussed under each of the following sections as necessary and appropriate.

# **II. Boring Records** [§460.E.1., 9 VAC 20-81-10]

- A. **Number of Borings** [§460.E.1.a., 9 VAC 20-81-10] Indicate the number of borings completed as part of this investigation, comparing the number completed with the number required based on the proposed waste management boundary acreage as indicated in Table 5.1 of § 9 VAC 20-81-460.E.1.a.
- B. **Location of Borings** [§460.E.1.a. and d., 9 VAC 20-81-10] Provide a discussion indicating how boring locations were selected. Borings shall be located in a grid pattern in an effort to identify each major geomorphic feature and to enable the development of detailed cross-sections of the proposed facility. Reference the map provided in PTA Attachment XII.
- C. **Depth of Borings** [§460.E.1.a. and e., 9 VAC 20-81-10] Provide a summary of the drilling methods used to determine the thickness of the uppermost aquifer. Borings shall be drilled continuously for the first 20 feet below the proposed lowest elevation of solid waste disposal or to bedrock. Provide a table identifying the boring ID, the boring depth and elevation (both from the existing ground and from the proposed base grade), and the boring's status (i.e. boring converted to piezometer or observation well, boring sealed, boring terminated at bedrock, etc.). Reference the boring logs provided in PTA Attachment XII.
- D. **Samplings** [§460.E.1.a., e., and f., 9 VAC 20-81-10] Provide a summary of the methods used to collect boring samples. At a minimum, boring samples shall be collected continuously for the first 20 feet below the lowest elevation of the proposed solid waste disposal facility or to bedrock, whichever is shallower. Additional samples, as determined by the professional geologist or engineer shall be collected at five-foot intervals thereafter.

- Also, provide a description of any excavations, test pits, or other geophysical methods employed to supplement the soil boring investigation.
- E. **Observation Wells** [§460.E.1.g., 9 VAC 20-81-10] Identify the borings that were converted to water level observation wells, well nests, piezometers, or piezometer nests, referencing the table provided in Section II.C. of this report. At a minimum, four borings shall be converted to allow determination of the rate and direction of groundwater flow across the site. The total number of wells or well nests shall be based on the complexity of the geology of the site, as determined by this investigation.
- F. **In-Situ Hydraulic Conductivity** [§460.E.1.h., 9 VAC 20-81-10] Describe the methods and results of the field tests conducted to determine the in situ hydraulic conductivity of the uppermost aquifer. Provide the range and average values of hydraulic conductivity determined. Field data, laboratory reports, and supporting calculations should be provided in PTA Attachment XIII.
- G. **Sealing of Borings** [§460.E.1.i., 9 VAC 20-81-10] Provide a summary of the techniques used or to be used to seal all borings not converted to permanent monitoring wells and those wells located within the proposed solid waste disposal area (waste management boundary). In addition, provide a summary of the methods used to backfill and compact all test pits and excavations. Proper sealing and backfilling is necessary to prevent possible paths of leachate migration.

#### III. Geotechnical Report

A. **Description of Soil Units** [§460.E.2.b.(1), 9 VAC 20-81-10] Provide a description of the soil units including estimates of soil unit thickness, continuity across the site, and genesis. Laboratory determinations of the soil unit's physical properties including natural moisture, Atterberg limits, natural unit weight, method of sampling, particle size distribution, specific gravity, percent compaction of the test sample, remolded density and remolded moisture content, and the percent saturation of the test sample, and other related test results.

Also, perform sufficient laboratory analyses to provide information concerning petrologic variation, sorting (for unconsolidated sedimentary units), cementation (for consolidated sedimentary units), moisture content, and hydraulic conductivity of each significant geologic unit or soil zone above the confining layer. Perform sufficient laboratory analyses to describe the mineralogy, degree of compaction, moisture content, and other pertinent characteristics of any clays or other fine-grained sediments identified as the confining layer. Suggested laboratory methods can be found in Appendix C.2.a. of this Submission Instruction.

This section should include corroborating and supporting data that will provide the evidence that (1) the facility will not be sited in geologically unstable areas [§ 9 VAC 20-81-120.B.] and (2) the facility will not be located in wetlands [§ 9 VAC 20-81-120.E.].

Present all sieve analysis, density, Atterberg limits, moisture content, other related data in PTA Attachment XIII.

- B. Remolded Hydraulic Conductivity [§460.E.2.b.(2), 9 VAC 20-81-10] Provide a description of remolded hydraulic conductivity data for the soil units that are proposed for use as a drainage layer, impermeable cap or impermeable liner material, as supported by laboratory determinations. Remolded hydraulic conductivity tests require a Proctor compaction test (ASTM D698 or D1557) soil classification, liquid limit, plastic limit, particle size distribution, specific gravity, percent compaction of the test sample, remolded density and remolded moisture content, and the percent saturation of the test sample. Proctor compaction test data and hydraulic conductivity test sample data should be plotted on standard moisture-density test graphs. All test results as described herein should be provided in PTA Attachment XIII.
- C. **Volume of Materials** [§460.E.2.b.(3), 9 VAC 20-81-10] Provide an estimate of the available volume of materials suitable for use as liner, cap, and drainage layer for the proposed solid waste disposal facility, in addition to discussing the anticipated uses of all on-site materials. Calculations substantiating the information provided in this section should be provided in PTA Attachment XIV.

# IV. Hydrogeologic Report

#### A. Water Table Information

- 1. **Groundwater Level Measurements** [§460.E.2.c.(1), 9 VAC 20-81-10] Provide a summary of the methods used to determine static water levels in each of the monitoring, piezometer, or observation wells as performed to create the potentiometric surface map(s) provided in PTA Attachment XV. Include a summary table identifying the well ID, elevation of the well casing top, depth to water within the well, and subsequent groundwater elevation.
- 2. **Vertical Flow Components** [§460.E.2.c.(1), 9 VAC 20-81-10] Provide a description of vertical flow components observed in different wells during the process of data collection.
- 3. **Seasonal and Temporal Factors** [§460.E.2.c.(1), 9 VAC 20-81-10] Include an assessment of the factors that may result in short- or long-term variations in the measured groundwater level and flow patterns. Such factors may include:
  - Infiltration from precipitation;
  - Off-site well pumping, recharges, and discharges;
  - Tidal processes or other intermittent natural variations (e.g., river stage);
  - On-site well pumping; and
  - Off-site and on-site construction or changing land use patterns.

- B. **Field Procedures and Results** [§460.E.2.c.(2), 9 VAC 20-81-10] Provide a discussion of field test procedures and results, laboratory determinations made on undisturbed samples, recharge areas, discharge areas, adjacent or areal usage, and typical radii of influence of pumping wells.
- C. **Description of Site Geology** [§460.E.2.c.(3), 9 VAC 20-81-10] Provide a discussion of the regional geologic setting, the site geology and a cataloging and description of the uppermost aquifer from the site investigation and from referenced literature. The geologic description shall include a discussion of the prevalence and orientation of fractures, faults, and other structural discontinuities, and presence of any other significant geologic features.
- D. **Description of Aquifer** [§460.E.2.c.(3), 9 VAC 20-81-10] Provide a description addressing the aquifer's homogeneity, horizontal and vertical extent, isotropy, the potential for ground water remediation, if required, and the factors influencing the proper placement of a ground water monitoring network.

{If the application is for a solid waste management facility regulated under Part IV (9 VAC 20-81-300 et seq.)} Submit a report cataloging and describing the aquifers, geologic features, or any similar characteristic of the site that might affect the operation of the facility or be affected by that operation. Discussion on the types of information to be provided is discussed above.

If a geological map or report from either the Department of Mines, Minerals, and Energy or the U.S. Geological Survey is published, it shall be included with this report.

- G. *PTA Attachment XII: Location of Borings and Boring Logs* [§460.E.2.a., 9 VAC 20-81-10] Provide a map identifying the facility and waste management boundaries and the locations of all borings completed as part of the hydrogeologic and geotechnical site evaluation. Following the map, detail boring logs for each boring and well as-builts for each boring converted to an observation well, well nest, piezometers, or piezometers nest should be included. At a minimum, each boring log shall include:
  - The type of drilling and sampling equipment used;
  - The date each boring was started and finished;
  - A soil or rock description in accordance with the United Soil Classification System (USCS) or Rock Quality Designation;
  - The method of sampling;
  - The depth of sample collection;
  - The water levels encountered: and
  - The Standard Penetration Test blow counts, if applicable.

In addition, boring locations and elevations shall be surveyed with a precision of 0.01 foot. At least one surveyed point shall be indelibly marked by the surveyor on each well. All depths of soil and rock as described on the boring log shall be corrected to National Geodetic Vertical Datum, if available.

- H. *PTA Attachment XIII: Laboratory and Field Data* [§460.E., 9 VAC 20-81-10] Copies of laboratory test results and field data collected during the hydrogeologic and geotechnical investigation should be provided in this attachment.
- I. *PTA Attachment XIV: Materials Volume Calculations* [§460.E.2.b.(3), 9 VAC 20-81-10] Provide calculations substantiating the information provided in Section III.C. of the Hydrogeologic and Geotechnical Report.
- J. PTA Attachment XV: Geologic Maps, Orthogonal Cross-Sections, and Potentiometric Surface Maps [§460.E.2.c.(4), E.2.c.(5), and E.2.c.(6), 9 VAC 20-81-10]
  - 1. **Geologic Maps** [§460.E.2.c.(4), 9 VAC 20-81-10] A geologic map(s) of the proposed area based on the borings and literature review should be provided at a scale of 1 inch = 200 feet showing ground surface contours, various geologic formations locations of the uppermost aquifer and aquifer hydraulically interconnected beneath the facility and, if present, the extent of the plume of contamination that has entered the groundwater from existing units. An example geologic map is provided in <u>Appendix C.2.b.</u> of this Submission Instruction.

Published geologic maps at a scale of 1:24,000 or larger; published regional geologic maps at a scale of 1:250,000 or larger; or other published map may be submitted in lieu of the site specific map.

- 2. Orthogonal Cross-Sections [§460.E.2.c.(5), 9 VAC 20-81-10] Provide an overall facility map indicating the location of each cross section and at least two generally orthogonal, detailed site specific cross section maps depicting significant geologic or structural trends identified on the geologic maps and reflecting features in relation to local and regional groundwater flow. Each cross section should show the approximate construction of landfill base grades, water table, surficial features, petrography of significant formations, significant structural features, stratigraphic contacts between formations, zones of high permeability or fracture, the location of each borehole, depth of termination, depth to the zone of saturation, and depiction of any geophysical logs along the line of the cross section. An example orthogonal cross-section is provided in Appendix C.2.c. of this Submission Instruction.
- 3. **Potentiometric Surface Maps** [§460.E.2.c.(6), 9 VAC 20-81-10] Provide a potentiometric surface map(s) estimating the uppermost aquifer that defines the groundwater conditions encountered below the proposed solid waste disposal area based on stabilized elevations. A map should be provided for each set of groundwater elevation data available. In constructing a potentiometric surface map the applicant should have used raw data from piezometers or wells screened at equivalent stratigraphic horizons. Information obtained from the piezometer cluster

readings shall be used to construct flow nets in addition to surface maps. An example potentiometric surface map is provided in <u>Appendix C.2.d.</u> of this Submission Instruction.

# K. PTA Attachment XVI: VDOT Adequacy Report and Approval Letter

- 1. *(If the application is for a sanitary landfill)* [Code of Virginia §10.1-1408.1.D.1. and 1408.4.A.1.; §460.G., 9 VAC 20-81-10] Provide a copy of the adequacy report submitted to the Virginia Department of Transportation (VDOT) or other responsible agency and subsequent approval letter. The report should address the adequacy of transportation facilities that will be available to serve the disposal facility, including daily travel routes and traffic volumes that will correlate with the daily disposal limit, road congestion, and highway safety. An example VDOT approval letter is provided in Appendix C.3. of this Submission Instruction.
- 2. {If the application is for a CDD or industrial landfill or other solid waste management facility} [Code of Virginia §10.1-1408.1.D.1] Provide a copy of the letter issued by the Virginia Department of Transportation indicating sufficient infrastructure exists/will exist to safely handle the proposed waste flow. An example VDOT approval letter is provided in Appendix C.4. of this Submission Instruction.
- L. *PTA Attachment XVII: Landfill Impact Statement* [Code of Virginia §10.1-1408.4.A.2. and B.6.; §460.H., 9 VAC 20-81-10] [Applicable only to sanitary landfills] Submit a report discussing the environmental impact of the proposed sanitary landfill on parks and recreational areas, wildlife management areas, critical habitat areas of endangered species as designated by applicable local, state, or federal agencies, public water supplies, marine resources, wetlands, historic sites, fish and wildlife, water quality, and tourism. The required report shall be referred to a Landfill Impact Statement (LIS). It is similar to but not the same as an Environmental Impact Statement (EIS) required by 40 CFR Part 6. The applicant shall contact the appropriate state and federal agencies to request their opinion on the impact of the landfill in the areas listed above. The applicant shall provide all necessary documentation and maps to these agencies. The applicant shall provide to the Department a comprehensive report of the findings of the agencies and its own consultants. The impact statement shall consider landfill siting and configuration alternatives and will discuss the reasons why each alternative is/is not feasible. Impacts and any potential solutions to each impact will be discussed.

**Format** The format used for the LIS should encourage clear analysis and presentation of alternatives including the proposed action and the environmental, economical, and social impacts. The LIS should start with a title page and table of contents followed by the following sections and discussions. The title page should identify the facility name and permit number, the permit applicant, document date, and document preparer information. In addition, the header or footer of each page should include the facility name, permit number, document title, revision date, and page number.

# I. Executive Summary

# Submission Instruction No. 1

Provide an executive summary of the Landfill Impact Statement (LIS), starting with a brief description of the proposed facility.

# II. Purpose of and Need for Action

The purpose and need of the LIS is to assess the environmental impact of the proposed sanitary landfill on existing parks and recreation areas; wildlife management areas; critical habitat areas of endangered species as designated by applicable local, state, or federal agencies; public water supplies; marine resources; wetlands; historic sites; fish and wildlife; water quality and tourism.

# III. Alternatives, including the Selected Alternative

Discuss the advantages and disadvantages of several alternatives for siting a new landfill or for expansion of an existing sanitary landfill, as appropriate, and select an alternative with proper justification.

# **IV.** Affected Environments of the Selected Alternative

Referencing the Regional Map provided in PTA Attachment IX, as appropriate, discuss the following features which may be impacted as a result of the selected alternative. Correspondence received from applicable local, state, or federal agencies addressing the proposed facility's environmental impact on these features along with record search results should be provided as an Appendix to the LIS.

#### A. Parks and Recreation Areas

Identify the parks and recreational areas located within 5 miles of the proposed facility. Discuss the potential impact to these areas based on correspondence between the applicant/consultant and the Virginia Department of Conservation and Recreation (DCR) or other applicable local, state, or federal agencies. Provide Best Management Practices, as approved, suggested, or supported by DCR, to be used during construction and operation of the proposed facility that will minimize and/or eliminate the environmental impacts identified.

# **B. Wildlife Management Areas**

Identify the wildlife management/critical habitat areas of endangered species located within 5 miles of the proposed facility as identified by the Virginia Department of Game and Inland Fisheries (DGIF) or other applicable local, state, or federal agencies. Discuss the potential impact to these areas and provide BMPs, as approved, suggested, or supported by DGIF or other agencies, to be used during construction and operation of the facility that will minimize and/or eliminate the environmental impact.

# C. **Public Water Supplies** [Code of Virginia § 10.1-1408.4.B.3; §120.C.3.a.(1) and (2), 9 VAC 20-81-10]

Identify the public water supplies located within 5 miles of the proposed facility as identified by the Virginia Department of Health (VDH) or other applicable local, state, or federal agencies. Discuss the potential impact to these supplies

and provide BMPs, if necessary, to be used during construction and operation of the facility that will minimize and/or eliminate the environmental impact. Keep in mind the statute limitations of §10.1-1408.4.B.3. in regards to the proximity of a landfill to a public water supply well.

[If existing surface or groundwater public water supply intakes or reservoirs are located between one (1) mile and three (3) miles of the perimeter of the waste management boundary] Provide the information as requested in Guidance Memo No. 04-2005 Sanitary Landfill Siting Relative to a Public Water Supply Intake or Reservoir, demonstrating that the proposed facility will meet the requirements of § 10.1-1408.4.B.3.(i) through (iv).

{If the landfill is downgradient of all public water supply intakes or reservoirs} Provide information to prove that no well, spring, or other groundwater source of drinking water is located within 500 feet of the proposed location. The demonstration should include information and calculations of radius of influence (i.e. cone of depression) to show that pumping rates of these sources do not cause the landfill to become upgradient of these sources.

{If existing surface or groundwater public water supply intakes or reservoirs are located within one (1) mile downgradient of the perimeter of the waste management boundary, the landfill can **NOT** be sited at the proposed location}

#### D. Marine Resources

Identify any marine resources located within 5 miles of the proposed facility as identified by applicable local, state, or federal agencies. Discuss the potential impact to these resources and provide BMPs to be used during construction and operation of the facility that will minimize and/or eliminate the environmental impact.

#### E. Wetlands

Identify the amount and types of wetlands located within 5 miles of the proposed facility as identified on United States Geological Survey (USGS) quadrangle maps, National Wetlands Inventory (NWI) maps, and Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM). Discuss the potential impact to these resources and provide BMPs to be used during construction and operation of the facility that will minimize and/or eliminate the environmental impact.

#### F. Historic Sites

Identify the historic resources located within 5 miles of the proposed facility as identified by the Virginia Department of Historic Resources (DHR) or other applicable local, state, or federal agencies. Discuss the potential impact to these sites and provide BMPs, as approved, suggested, or supported by DHR or other

applicable agencies, to be used during construction and operation of the facility that will minimize and/or eliminate the environmental impact.

#### G. Fish and Wildlife

Identify the fish and wildlife resources located within 5 miles of the proposed facility as identified by DGIF or other applicable local, state, or federal agencies. Discuss the potential impact to these resources and provide BMPs, as approved, suggested, or supported by DHR or other applicable agencies, to be used during construction and operation of the facility that will minimize and/or eliminate the environmental impact.

#### H. Water Quality

Identify the surface and groundwater resources located within 5 miles of the proposed facility. Discuss the potential impact to these resources and provide BMPs, if necessary, to be used during construction and operation of the facility that will minimize and/or eliminate the environmental impact.

#### I. Tourism

Identify the tourism opportunities located within 5 miles of the proposed facility, as identified by local government and businesses, and DCR. Discuss the potential impact to these opportunities and provide BMPs to be used during construction and operation of the facility that will minimize and/or eliminate the environmental impact.

# V. Environmental Consequences of the Alternatives

Discuss the environmental consequences of each of the alternatives presented in Section III of this LIS, such as loss of land used for forestry, agriculture, or other purposes, wetlands and streams, if any, noise pollution, odor, and traffic.

Discuss how the environmental consequences of the alternatives will be mitigated by meeting the regulatory requirements of the Virginia Waste Management Act and the Virginia Solid Waste Management Regulations.

#### VI. Coordination

List the local, state, federal, and/or private agencies that have been contacted for information and environmental assessment.

#### VII. List of Contributors

List the consultants and/or agencies that contributed in the preparation of this LIS.

# VIII. References

List the references and/or personal contact, if any, that are cited in the text of this LIS.

- M. *PTA Attachment XVIII: Certification and Documentation of Adjacent Property Owner Notification* [§460.I., 9 VAC 20-81-10] Provide a statement signed by the applicant indicating all adjacent property owners or occupants have been notified of the intent to develop a solid waste management facility on the site. Include a copy of the notice sent and a list including the names and addresses of those notified. An example statement and notice provided are provided in <a href="Appendix C.5">Appendix C.5</a> and <a href="Appendix C.6">Appendix C.6</a> of this Submission Instruction.
- N. *PTA Attachment XIX: Discussion of Public Interest Served* [§460.K., 9 VAC 20-81-10] Provide a discussion on how the public interest will be served by the proposed facility based on one or more of the conditions listed under § 9 VAC 20-81-460.K.1. through K.7.
- O. PTA Attachment XX: Correspondence to and from FAA, Local Aviation Authority, and Local Airport [§120.I., 9 VAC 20-81-10] [For sanitary landfills located within 5 miles of any airport runway end used by turbojet or piston-type aircraft] Provide copies of the notification sent in accordance with § 9 VAC 20-81-120.I. concerning the proposed facility's proximity to the airport and correspondence received from the affected airport, local aviation authority, and the Federal Aviation Administration (FAA) in response. Restrictions imposed by the FAA or local airport may be incorporated into the Part A Authorization issued.
- P. *PTA Attachment XXI: FEMA Flood Insurance Rate Map* [§120.A., 9 VAC 20-81-10] In support of question 1 on DEQ Form SW PTA, provide a copy of the FEMA Flood Insurance Rate Map (FIRM) showing the proposed facility is not located within the 100-year floodplain.
- Q. PTA Attachment XXII: Wetland Delineation Map and Copies of Wetland and Stream Impact Permits from ACOE and DEQ [Code of Virginia § 10.1-1408.4.B.2 and 10.1-1408.5.E.; §120.E, 9 VAC 20-81-10] [If wetlands are located within the facility boundary and will be impacted by the proposed site construction and operation]

Review Guidance Memo No. 03-2005: Guidance for the implementation of HB2192 regarding wetlands siting and increased groundwater monitoring originally issued as Guidance 02-1999, to determine whether the proposed landfill can be sited. As indicated in the Guidance Memo, provide the necessary information and documentation indicating the facility meets the requirements of Code of Virginia § 10.1-1408.4 B.2. and § 10.1-1408.5 E. and VSWMR § 9 VAC 20-81-120.E.3.

In addition, provide a Wetland Delineation Map and copies of the Wetland and Stream Impact Permits issued by the Army Corps of Engineers and/or the Virginia Water

Protection Program should be provided here. As indicated in Waste Guidance Memo 06-2005 and Water Guidance Memo No. 05-2012: Coordination of Permitting Requirements for Wetlands and the Siting of Solid Waste Landfills and Clarification Memo issued April 13, 2009, wetlands and stream impact permits will need to be issued prior to the applicant receiving a Part A Authorization in accordance with the procedures outlined in Section VI.B.3. of this Submission Instruction.

R. PTA Attachment XXIII: Demonstration Regarding Proximity to Fault or Siting within a Seismic Impact Zone [§120.C.3.b., 9 VAC 20-81-10]

{If the response to question 8.f. on DEQ Form SW PTA is less than 200 feet} Provide a demonstration indicating that an alternate setback distance of less than 200 feet will prevent damage to the structural integrity of the facility and will be protective of human health and the environment.

(If the response to question 8.g. on DEQ Form SW PTA A is yes) Provide a demonstration that all containment structures, including liners, leachate collection systems, and surface water control systems, are designed to resist the maximum horizontal acceleration in lithified earth material for the site. Review Guidance Memo 02-1993: Seismic Impact Zone, Part A Demonstration Requirements, for additional information regarding the demonstration to be submitted in this Attachment.

S. PTA Attachment XXIV: Request for Exemption of Site from the Requirements of §9 VAC 20-81-120.D. and/or 120.F. [§120.D., F., and G., 9 VAC 20-81-10]

[If the application is for a CDD or industrial landfill and the applicant wishes to be exempt from the groundwater monitoring requirements of § 9 VAC 20-81-250.] The applicant shall provide a demonstration certified by a qualified groundwater scientist indicating that there is no potential for migration of any Table 3.1 constituents to the uppermost aquifer during the active life and post-closure care period of the landfill. This demonstration should address the requirements of 9 VAC 20-81-250.A.1.c. and be provided in lieu of the Groundwater Monitoring Plan as PTB Attachment X (see Section V.L. below).

{If any response to questions 7.a. through 7.e. on DEQ Form SW PTA is yes} The applicant shall provide specific site conditions to be considered during the Director's review in addition to providing an explanation of precautions necessary to assure compliance with all design, construction, operation, and closure provisions of the VSWMR.

- V. PART B PERMIT APPLICATION [§450.D., 470, and 480, 9 VAC 20-81-10] The Part B Permit Application contains the detailed engineering design and operating plans for the proposed facility. According to § 9 VAC 20-81-450.D.1., the applicant shall provide three copies of the Part B Permit Application and the attachments specified in § 9 VAC 20-81-470 or 480. Please check with the DEQ Regional Office responsible for the proposed location of the facility to determine the number and format of copies desired.
  - A. *Application Form* [§470.D., 9 VAC 20-81-10] Provide a signed DEQ Form SW PTB. Mark entries that do not pertain to the type of the permit being applied for with "N/A" rather than leaving them blank. The attachments as specified on the form, are discussed further below, and should be submitted in the order prescribed This form is available on the DEQ Website and accessible through the following link:
    - http://www.deq.virginia.gov/export/sites/default/waste/pdf/forms/partb.pdf
  - B. *Permit Application Fee* [§450.D.1., 9 VAC 20-81-10; §60., 9 VAC 20-90-10] Submit a check, draft, or postal money order made payable to the Treasurer of Virginia for the required permit application fee in accordance with the Solid Waste Management Facility Permit Action Fees and Annual Fees regulation (9 VAC 20-90-10 *et seq.*) to DEQ Receipts Control, P.O. Box 1104, Richmond, Virginia 23218. Applications not accompanied by the proper fee or containing insufficient fees will not be considered complete and shall not be processed by the Department.
  - C. *PTB Attachment I: Notice of Intent* [§450.B., 9 VAC 20-81-10] Provide a copy of the Notice of Intent cover letter specified in Section III.A.
  - D. *PTB Attachment II: VDOT Adequacy Report and Approval Letter* [§450.B., 9 VAC 20-81-10] Provide a reference to PTA Attachment XVI. This attachment is only applicable to permit amendments requesting increases in the facility's daily disposal limit.
  - E. *PTB Attachment III: Design Plans* [§470.A.1. and 480.A., 9 VAC 20-81-10]
    - 1. *(If the application is for a solid waste disposal facility)* See Submission Instruction No. 2 for detailed instructions regarding the Design Plans to be submitted in this Attachment.
    - 2. *{If the application is for a waste to energy, thermal treatment, or incineration facility}* See Submission Instruction No. 3 for detailed instructions regarding the Design Plans to be submitted in this Attachment.
    - 3. *{If the application is for any other solid waste management facility}* See Submission Instruction No. 4 for detailed instructions regarding the Design Plans to be submitted in this Attachment.
  - F. *PTB Attachment IV: Closure Plan* [§160, 470.A.2. and 480.D., 9 VAC 20-81-10] See Submission Instruction No. 6 for detailed instructions regarding the Closure Plan to be submitted in this Attachment.

- G. *PTB Attachment V: Post-Closure Care Plan* [§170, 470.A.3., 9 VAC 20-81-10] *(Applicable only to solid waste disposal facilities)* See Submission Instruction No. 6 for detailed instructions regarding the Post-Closure Care Plan to be submitted in this Attachment.
- H. *PTB Attachment VI: Design Report* [§470.B. and 480.B., 9 VAC 20-81-10] See Submission Instruction No. 2, 3, or 4 as noted in Section V.E. above for detailed instructions regarding the Design Report to be submitted in this Attachment.
- I. *PTB Attachment VII: Construction Quality Assurance (CQA) Plan & Technical Specifications* [§130.Q.2., 470.B. and 480.B., 9 VAC 20-81-10] See Submission Instruction No. 2, 3, or 4 as noted in Section V.E. above for detailed instructions regarding the CQA Plan and Technical Specifications to be submitted in this Attachment.
- J. *PTB Attachment VIII: Leachate Management Plan* [§210, 470.B. and 480.B., 9 VAC 20-81-10] See Submission Instruction No. 10 for detailed instructions regarding the Leachate Management Plan to be submitted in this Attachment.
  - If the "Treated onsite and Discharged" box is checked on DEQ Form SW PTB, provide a copy of the VPDES permit issued in this Attachment.
- K. *PTB Attachment IX: Landfill Gas Management Plan and Landfill Gas Remediation Plan* [§200, 470.B. and 480.B., 9 VAC 20-81-10] See Submission Instruction No. 13 for detailed instructions regarding the Landfill Gas Management/Remediation Plans to be submitted in this Attachment.
- L. *PTB Attachment X: Groundwater Monitoring Plan* [§250, 9 VAC 20-81-10] See Submission Instruction No. 5, 11, or 12, as applicable, for detailed instructions regarding the Groundwater Monitoring Plan to be submitted in this Attachment.
- M. *PTB Attachment XI: Groundwater Corrective Action Plan* [§260, 9 VAC 20-81-10] See Submission Instruction No. 17 for detailed instructions regarding the Groundwater Corrective Action Plan to be submitted in this Attachment.
- N. *PTB Attachment XII: Financial Assurance Demonstration* [§9 VAC 20-70-10 *et seq.*; §470.C. and 480.C, 9 VAC 20-81-10] All facilities except for those owned and operated by State or Federal Agencies shall demonstrate financial assurance for closure, post-closure, and or corrective action costs in accordance with the Financial Assurance Regulations for Solid Waste Disposal, Transfer, and Treatment Facilities (9 VAC 20-70-10 *et seq.*). Once the closure plans are approved, a draft permit has been prepared, and prior to acceptace of waste or CTO for a new cell, the applicant must submit a financial assurance mechanism in the amount of the approved cost estimates. See Submission Instruction No. 9 for detailed instructions regarding the Financial Assurance Documentation to be submitted in this Attachment.
- O. *PTB Attachment XIII: Special Waste Documentation* [§140.B.4. and Part VI, Special Wastes (§610 through 660), 9 VAC 20-81-10] If the "Contaminated Soil" or "Other Special Wastes" box is checked on DEQ Form SW PTB, the applicant should review

Guidance Memo 04-1994: Guidelines for Special Waste Disposal and provide the Special Waste Disposal Request forms SPSW-1, SPSW-2, and SPSW-3 for each special waste proposed for acceptance at the solid waste disposal or management facility. Procedures for handling and disposing of each special waste identified should also be provided.

- P. *PTB Attachment XIV: Alternate Liner Demonstration* [§130.J.1.c. and J.2.c., 9 VAC 20-81-10]
  - 1. *(Applicable to Sanitary Landfills)* If the "Additional Alternate" sanitary landfill liner design is checked on DEQ Form SW PTB, the applicant shall provide a demonstration indicating that the proposed alternate liner design meets the regulatory requirements of § 9 VAC 20-81-130.J.1.c. See Section V.A. of Submission Instruction No. 2 for detailed instructions regarding the information to be submitted as part of this demonstration.
  - 2. *[Applicable to CDD and Industrial Landfills]* If the "Alternate Liner" CDD or industrial landfill liner design is checked on DEQ Form SW PTB, the applicant shall provide a demonstration indicating that the proposed alternate liner design meets the regulatory requirements of § 9 VAC 20-81-130.J.2.c. See Section V.B. of Submission Instruction No. 2 for detailed instructions regarding the information to be submitted as part of this demonstration.
- Q. *PTB Attachment XV: Laboratory Test Results Documenting Permeability of In-place Soils* [§130. J.2.d., 9 VAC 20-81-10] *(Applicable only to CDD and Industrial Landfills)* If the "In-Place Soil" liner design is checked on DEQ Form SW PTB, the applicant shall provide laboratory test results documenting the permeability of in-place soils. The in-place soil liner proposed shall be of equivalent thickness and have a hydraulic conductivity equal to or less than the clay liner specified under § 9 VAC 20-130.J.2.a. (i.e. the liner will be a minimum of one foot thick and the hydraulic conductivity shall be equal to or less than 1 x 10<sup>-7</sup> cm/sec).
- R. *PTB Attachment XVI: Alternate Final Cover Demonstration* [§160.D.2.f., 9 VAC 20-81-10] If the "Additional Alternate" final cover design is checked on DEQ Form SW PTB, the applicant shall provide a demonstration indicating that the proposed alternate final cover design meets the regulatory requirements of § 9 VAC 20-81-160.D.2.f. The demonstration shall show that:
  - 1. The proposed infiltration layer achieves an equivalent reduction in infiltration as would be achieved using 18 inches of earthen material with a hydraulic conductivity less than or equal to the hydraulic conductivity of the bottom liner system or natural subsoils present or no greater than 1 x 10<sup>-5</sup> cm/sec, whichever is greater; and
  - 2. The 24-inch erosion layer is capable of sustaining native plant growth, and will provide protection of the infiltration layer from the effects of erosion, frost, and wind.

Additional information regarding the demonstration can be found in Guidance Memo 2009-04: Final Cap System Hydraulic Conductivity Testing—Infiltration Layer.

S. *PTB Attachment XVII: Research, Development, and Demonstration Plan* [§600.F.7., 9 VAC 20-81-10] [Research, Development, and Demonstration (RDD) Plans are optional and only applicable to sanitary landfills designed with a composite liner system, as required by § 9 VAC 20-81-130.J.1., and leachate collection system.] The RDD Plan submitted in this attachment should discuss the applicability requirements of § 9 VAC 20-81-600.F.7.a. in reference to the proposed facility; the desired RDD activity, as allowed under § 9 VAC 20-81-600.F.7.b., and provide the documentation and information requested in § 9 VAC 20-81-600.F.7.c. Waste Guidance Memo 05-2009: Research, Development, and Demonstration Plans has been provided to describe the information that should be submitted as part of this attachment.

# VI. INITIAL PERMIT PROCESSING AND ISSUANCE

A. *NOI Processing* [§450.B.9., 9 VAC 20-81-10]

Once the Notice of Intent documentation specified in Section III above has been received by the appropriate DEQ Regional Office, it will be reviewed for completeness. Once the application is considered complete, the applicant will be notified to submit the Part A and Part B Permit Applications discussed in Sections IV and V above. The review process is set up to be sequential as there is a substantial cost involved for the applicant in the preparation and submittal of a Part B application and a potential risk to the applicant if for some reason the site is not suitable or otherwise does not meet all of the requirements and the Part A is not approved. However, there may be circumstances where concurrent reviews might be conducted in order to meet applicant needs for expedient permit processing. This would involve fairly straightforward, non-complex situations where applicant hardship timing issues exist. Concurrent processing may be requested by the applicant at a pre-application meeting and this would be the time for the applicant to explain their scheduling needs. At a minimum, the Part B review should not start until after the Part A completeness review has been conducted and the application is deemed administratively complete.

# B. *Part A Permit Processing* [§450.C., 9 VAC 20-81-10]

1. <u>Completeness Review</u> [§450.C.2., 9 VAC 20-81-10] Once the Part A Application has been received by the appropriate DEQ Regional Office, it will be reviewed for administrative completeness. The DEQ shall respond within 30 days indicating whether the application is administratively complete or incomplete.

For incomplete applications, the applicant will be granted 60 days, or alternate timeframe approved by the Department, to furnish additional information as requested. If the requested information is not provided, the Department will return the application without further review. Subsequent resubmittals of the application submitted after 18 months from the date of the Department's response letter, shall be considered a new application, requiring an additional Part A Permit fee, unless an alternate timeline has been approved.

- 2. <u>Technical Review</u> [§450.C.3., 9 VAC 20-81-10] Once the Part A Application has been deemed administratively complete, the DEQ Regional Office will review the submittal for technical adequacy. During this review, the Department may request additional information of the applicant or request a site visit.
- 3. Approval or Conditional Approval [§450.C.4., 9 VAC 20-81-10] Once the Part A Application has been deemed technically adequate, the DEQ Regional Office will issue a Part A Authorization letter. This letter may contain conditions that will need to be addressed in the Part B Permit Application. Once the Part A Authorization letter is issued, the facility may submit the Part B Permit Application, if it has not done so already.

# C. *Part B Permit Processing* [§450.D., 9 VAC 20-81-10]

- 1. <u>Completeness Review</u> [§450.D.2., 9 VAC 20-81-10] Once the Part B Application has been received by the appropriate DEQ Regional Office, it will be reviewed for administrative completeness. The DEQ shall respond within 30 days indicating whether the application is administratively complete or incomplete.
  - For incomplete applications, the applicant will be asked to furnish additional information as requested. If the requested information is not provided, the Department will return the application without further review. Subsequent resubmittals of the application submitted after 18 months from the date of the Department's response letter, shall be considered a new application, requiring an additional Part B Permit fee, unless an alternate timeline has been approved.
- 2. <u>Technical Review</u> [§450.D.3., 9 VAC 20-81-10] Once the Part B Application has been deemed administratively complete, the DEQ Regional Office will review the submittal for technical adequacy and regulatory compliance. During this review, the Department may request additional information of the applicant. At the end of this evaluation, the Department will notify the applicant that the application is technically adequate and in regulatory compliance or that the Department intends to deny the application.
- 3. <u>Draft Permit</u> [§450.E.1. and 450.E.2., and 490.A., 9 VAC 20-81-10] Once the Part B application is determined to be technically adequate and in regulatory compliance, the Department shall prepare the draft permit. The draft permit will establish construction and monitoring requirements, operating limitations or guides, waste limitations, if any, and any other details essential to the operation, maintenance, and closure of the proposed facility. A copy of the draft permit will be made available for viewing by the public at the applicant's place of business or at the DEQ Regional Office, or both. Arrangements may also be made for the draft permit to be located at a public library in the vicinity of the facility.
- 4. Public Participation [§450.E.2. through E.6., 9 VAC 20-81-10]
  - a. *Public Notice* [§450.E.2., 9 VAC 20-81-10] The Department will prepare a public notice announcing the beginning of the public comment period, the availability of the draft permit, the location of the public hearing, and the procedures for providing comments on the draft permit. The applicant will be responsible for placing this notice in a newspaper with general circulation in the area of the facility. The DEQ Regional Office will provide a copy of the notice to the chief administrative officer of all cities and counties that are contiguous to the host community; to other applicable state agencies; and applicable DEQ program managers.
  - b. *Public Hearing* [§450.E.2., 9 VAC 20-81-10] The Department shall hold a public hearing within the local government jurisdiction of the facility (i.e. at a public library in the vicinity of the facility, a local government building, or the

- applicant's place of business). The public hearing is an opportunity for the Department to collect comments from the public concerning the proposed draft permit. The public hearing will be scheduled a minimum of 30 days after the public notice is published.
- c. *Public Comment Period* [§450.E.4., 9 VAC 20-81-10] The public comment period shall last a minimum of 45 days (The initial 30 days will be before the public hearing, and an additional 15 days will be provided after the hearing).
- d. *Response to Public Comments* [§450.E.8., 9 VAC 20-81-10] The Department shall respond in writing to all comments received during the public comment period. The response shall be submitted to the applicant and all persons who commented during the public comment period and shall indicate whether the draft permit will be denied, issued as drafted, or modified to address comments and issued. The decision to deny, issue, or modify the permit shall be rendered within 90 days of the close of the public comment period.
- 5. Permit Issuance [§450.E.7., 9 VAC 20-81-10] If the Director decides to issue the permit as drafted or as modified, a final permit shall be issued to the applicant. Copies of the final permit should be provided to all interested parties (i.e. the applicants consultant, the chief administrative officer of the local governing body, applicable state agencies, etc.).
- 6. <u>Permit Denial</u> [§550, 9 VAC 20-81-10] The decision to deny a permit application may be based on any of the following:
  - The applicant fails to provide complete information;
  - The facility does not conform with the siting standards as specified in § 9 VAC 20-81-120 or § 9 VAC 20-81-320, unless an exemption or variance from the specific siting criteria has been granted;
  - The facility design and construction plans or operating plans, or both, fail to comply with the requirements specified for the proposed type of facility, unless an exemption or variance from the specific requirement has been granted;
  - The Department finds there is an adverse impact on the public health or environment by the proposed facility design, construction, or operation;
  - The applicant is unable to fulfill the financial responsibility requirements of § 9 VAC 20-70; or
  - Current information sufficient to make the determination required in § 10.1-1408.1 D of the Code of Virginia [Demonstration of Need (NOI/Part A Attachment VII) and VDOT Adequacy Report/Approval (Part A Attachment XVI)] has not been provided.
  - a. *Denial Notification* [§550.B. and 560.A., 9 VAC 20-81-10] If the Director intends to deny the permit application, the reason(s) shall be provided to the applicant in

- writing and sent to the applicant by certified mail within 30 days of the decision to deny.
- b. *Appeal* [§560.A., 9 VAC 20-81-10] During the 30-day period afforded by the Director's written denial notification, the applicant may submit a written request to the Director for a hearing to contest the Director's decision. The hearing shall be conducted in accordance with the Administrative Process Act (§ 2.2-4000 *et seq.* of the Code of Virginia).
- c. *Final Decision* [§560.B., 9 VAC 20-81-10] At the end of the 30-day period, the Director shall render a decision affirming or modifying the previous denial notification and provide notification to the applicant in writing. Again, the applicant has the opportunity to appeal in accordance with the Administrative Process Act (§ 2.2-4000 *et seq.* of the Code of Virginia).

# VII. PERMIT MODIFICATIONS

- A. *Major Modifications* [§600.F.3., 9 VAC 20-81-10] Major permit modifications are deemed to substantially alter the facility or its operation and are specified in Table 5.2 of 9 VAC 20-81-600.F.
  - 1. Submission Requirements
    - 1. *Notice of Intent* [§450.B. and 600.F.3.b., 9 VAC 20-81-10] The facility shall submit a letter (1) stating the precise location and intended use of the facility; (2) describing the exact change to be made to the permit conditions and supporting documents referenced by the permit; (3) identifying the proposed change(s) as a major modification; (4) explaining why the modification is needed; and (4) attaching area and site location maps.

If the modification is for an expansion or increase in capacity, the following additional items need to be addressed with the Notice of Intent, as applicable.

- i. *(If the modification is for a noncaptive industrial landfill)* Submit a revised Disclosure Statement as discussed in Section III.B. of this Submission Instruction.
- ii. *{If the modification is for a noncaptive industrial landfill}* Submit a revised Local Government Certification as discussed in Section III.C. of this Submission Instruction.
- iii. *{If the modification is for an existing sanitary landfill}* Provide an updated Disposal Capacity Guarantee as discussed in Section III.E. of this Submission Instruction.
- iv. *(If the modification is for an existing sanitary landfill)* Provide an updated Host Agreement or Discussion of Disposal Limits/Service Area as discussed in Section III.F. of this Submission Instruction.
- v. Provide an updated Demonstration of Need as discussed in Section III.G. of this Submission Instruction.
- 2. Part A Modification [§460 and 600.F.3.b.(4), 9 VAC 20-81-10] Consult Waste Guidance Memo 01-2009: Scenarios Under Which a Part A Amendment Is or Is Not Required to determine whether a Part A Modification is required. If a Part A Modification is required, the facility shall submit the following:
  - i. Application Form [§460.A., 9 VAC 20-81-10] Provide a new signed and certified DEQ Form SW PTA as discussed in Section IV.A. of this Submission Instruction.
  - ii. Permit Modification Fee [§90., 9 VAC 20-90-10] Submit a check, draft, or postal money order made payable to the Treasurer of Virginia for the required permit modification fee in accordance with the Solid Waste Management Facility Permit Action Fees and Annual Fees regulation (9 VAC 20-90-10 *et seq.*) to DEQ Receipts Control, P.O. Box 1104, Richmond, Virginia 23218. Applications not accompanied by the proper fee

- or containing insufficient fees will not be considered complete and shall not be processed by the Department.
- iii. PTA Attachments I through XXIV [§460.A., 9 VAC 20-81-10] Provide revised attachments as indicated in Waste Guidance Memo 01-2009. See Section IV above for detailed instructions on the information to include in each attachment.
- 3. Part B Modification [§470, 480, and 600.F.3.b.(4), 9 VAC 20-81-10]
  - i. Application Form [§470.D., 9 VAC 20-81-10] Provide a new signed DEQ Form SW PTB as discussed in Section V.A. of this Submission Instruction.
  - ii. Permit Modification Fee [§90., 9 VAC 20-90-10] Submit a check, draft, or postal money order made payable to the Treasurer of Virginia for the required permit modification fee in accordance with the Solid Waste Management Facility Permit Action Fees and Annual Fees regulation (9 VAC 20-90-10 *et seq.*) to DEQ Receipts Control, P.O. Box 1104, Richmond, Virginia 23218. Applications not accompanied by the proper fee or containing insufficient fees will not be considered complete and shall not be processed by the Department.
  - iii. PTB Attachments I through XVII [§460.A., 9 VAC 20-81-10] Provide revised attachments as applicable for the permit documents that will require modification as a result of the requested modification and those items indicated in Waste Guidance Memo 01-2009. See Section V above for detailed instructions on the information to include in each attachment.
- 4. Application Review/Processing [§600.F.3.c., 9 VAC 20-81-10] Once the Notice of Intent, Part A and Part B Modification documentation, as applicable, has been received by the appropriate DEQ Regional Office, it will be reviewed for administrative completeness and technical adequacy as discussed in Sections VI.A., VI.B., and VI.C. above. The DEQ shall respond within 90 days to indicate whether the application is adequate. The applicant will be granted 30 days, or longer if requested, to furnish additional information as requested. Once the application is considered technically adequate and in regulatory compliance, the Director has the following options:
  - i. Issue a Draft Permit and proceed with the required public participation and permit issuance procedures

*(If the application is for an increase in capacity or facility expansion)* The Department shall hold a public hearing in association with issuing the draft permit as described in Section VI.C.4. above.

*{For all other major amendments}* The public notice as described in Section VI.C.4.a. above shall announce a 30-day public comment period with the opportunity to request a public hearing. A public hearing may be warranted under the following situations:

- There is significant public interest in the modification of the permit in question;
- There are substantial, disputed issues relevant to the modification of the permit in question;
- The action requested is not inconsistent with or in violation of the VSWMR, the Waste Management Act, or federal law or regulations; or
- It is believed that a public hearing might clarify one or more issues involved in the permit decision.
- ii. Deny the request following the procedures of Section VI.H.
- iii. Approve the request with or without changes, as a temporary authorization following the procedures outlined in Section VII.D. below.
- B. *Minor Modifications* [§600.F.2., 9 VAC 20-81-10] Minor permit modifications consist of minor changes that keep the permit current, but do not substantially alter the permit conditions or reduce the capacity of the facility to protect human health and the environment. For any facility or permit modification not specified as a major modification or permitted change in Table 5.2 of 9 VAC 20-81-600.F., the applicant shall apply for a minor modification.
  - 1. <u>Submission Requirements:</u> The following items should be submitted as one package to the appropriate DEQ Regional Office by certified mail or other means to establish proof of delivery.
    - a. *Notice of Intent* [§450.B. and 600.F.2.c., 9 VAC 20-81-10] The facility shall submit a letter (1) stating the precise location and intended use of the facility; (2) describing the exact change to be made to the permit conditions and supporting documents referenced by the permit; (3) identifying the proposed change(s) as a minor modification; (4) explaining why the modification is needed; and (4) attaching area and site location maps.
      - If the minor modification would result in a facility that is more protective of human health and the environment, the Notice shall include an explanation of the manner in which the health and environment will be protected in a greater degree than required by the VSWMR.
    - b. Part A Modification [§460 and 600.F.2.c., 9 VAC 20-81-10] Consult Waste Guidance Memo 01-2009: Scenarios Under Which a Part A Amendment Is or Is Not Required to determine whether a Part A Modification is required. If a Part A Modification is necessary, consult Section VII.A.2. for the required submittal items. If the Part A Modification is not necessary, provide the additional documentation required with the Notice of Intent.
    - c. Part B Modification [§470, 480, and 600.F.2.c., 9 VAC 20-81-10]

- i. Application Form [§470.D., 9 VAC 20-81-10] Provide a new signed DEQ Form SW PTB as discussed in Section V.A. of this Submission Instruction.
- ii. PTB Attachments I through XVII [§460.A., 9 VAC 20-81-10] Provide revised attachments as applicable for the permit documents that will require modification as a result of the requested modification and those items indicated in Waste Guidance Memo 01-2009. See Section V above for detailed instructions on the information to include in each attachment.
- 2. <u>Application Review/Processing</u> [§600.F.2.c., 9 VAC 20-81-10] Once the Notice of Intent, Part A and Part B Modification documentation, as applicable, has been received by the appropriate DEQ Regional Office, it will be reviewed for administrative completeness and technical adequacy. Once the application is considered adequate, the Director shall issue the minor amendment; deny the request following the procedures of Section VI.H.
- 3. Permittee Requirement [§600.F.2.d., 9 VAC 20-81-10] Within 90 days of the minor modification issuance, the permittee shall send a notice of the modification to the local governing body of the county, city, or town in which the facility is located. A copy of the notification should be provided to the DEQ Regional Office to ensure compliance with § 9 VAC 20-81-600.F.2.d.
- C. *Permittee Change* [§600.F.1., 9 VAC 20-81-10] Modifications specified as Permittee Change in Table 5.2 of 9 VAC 20-81-600.F. may be implemented without prior Department approval. The following notifications shall be submitted to put the desired permittee change into effect:
  - 1. Notice of Intent [§450.B. and 600.F.1.a., 9 VAC 20-81-10] A minimum of 14 calendar days prior to implementing the desired permittee change, the facility shall submit a letter (1) stating the precise location and intended use of the facility; (2) describing the exact change to be made to the permit conditions and supporting documents referenced by the permit; (3) identifying the proposed change(s) as a permittee change; (4) explaining why the modification is needed; and (4) attaching area and site location maps.
  - 2. Notice to Local Governing Body [§600.F.1.b., 9 VAC 20-81-10] Within 90 days of implementing the permittee change, the permittee shall send a notice of the modification to the local governing body of the county, city, or town in which the facility is located. A copy of the notification should be provided to the DEQ Regional Office to ensure compliance with § 9 VAC 20-81-600.F.1.b.

# D. Temporary Authorization

1. <u>Applicability</u> [§600.F.4.b.(1), 9 VAC 20-81-10] A Temporary Authorization may be requested for any major modification, where the temporary authorization would provide improved management or treatment of a solid waste already listed in the facility permit and is necessary:

- a. To facilitate timely implementation of closure or corrective action activities [§9 VAC 20-81-600.F.4.c.(2)(a)];
- b. To prevent disruption of ongoing waste management activities [§ 9 VAC 20-81-600.F.4.c.(2)(b); or
- c. To enable the permittee to respond to sudden changes in the types or quantities of wastes managed under the facility permit **and** facilitate other changes to protect human health and the environment [§ 9 VAC 20-81-600.F.4.c.(2)(c) and (d)]
- 2. <u>Submission Requirements</u> [§600.F.4.b.(2), 9 VAC 20-81-10] The temporary authorization request shall be submitted to the DEQ Regional Office in letter form and include:
  - a. A description of the activities to be completed under the temporary authorization;
  - b. An explanation of why the temporary authorization is necessary; and
  - c. Sufficient information to ensure compliance with Part III (§ 9 VAC 20-81-100 *et seq.*) or Part IV (§ 9 VAC 20-81-300 *et seq.*).
- 3. Notification Requirement [§600.F.4.b.(3), 9 VAC 20-81-10] Within seven days of submitting the temporary authorization request, the permittee shall send a notice about the request to all persons on the facility mailing list. A copy of the notification should be provided to the DEQ Regional Office to ensure compliance with § 9 VAC 20-81-600.F.4.b.(3).
- 4. <u>Authorization Request Review/Processing</u> [§600.F.4.c., 9 VAC 20-81-10] Once the temporary authorization request has been received by the appropriate DEQ Regional Office, it will be reviewed for administrative completeness and technical adequacy. Once the application is considered adequate, the Director shall issue the requested temporary authorization or deny the request. If a temporary authorization is issued, it shall allow the permittee 180 days to proceed with the requested activity while the major modification application is processed.
- 5. Reissuance [§600.F.4.d., 9 VAC 20-81-10] The permittee may request the reissuance of the temporary authorization by providing the documentation provided in Section VII.D.2. and a copy of the notification sent as described in Section VII.D.3. If the Director finds the request is warranted, the temporary authorization may be reissued for an additional 180-day term.

# VIII. APPENDICES

# A. Pre-Application Correspondence

- 1. Public-Notice
- 2. Reservation of Disposal Capacity

# B. Notice of Intent Correspondence

- 1. Disposal Capacity Guarantee Locality-Owned/Locality-Operated Sanitary Landfill
- 2. Disposal Capacity Guarantee Privately-Owned Sanitary Landfill

# C. Part A Permit Application Correspondence

- 1. Part A Maps
  - a. Key Map Example
  - b. Near-Vicinity Map Example
  - c. Regional Map Example
- 2. Hydrogeologic and Geotechnical Report Information
  - a. Suggested Laboratory Methods
  - b. Geologic Map Example
  - c. Orthogonal Cross-Section Example
  - d. Potentiometric Surface Map Example
- 3. VDOT Approval Sanitary Landfill
- 4. VDOT Approval CDD or Industrial Landfill or Other Solid Waste Management Facility
- 5. Adjacent Property Owner Certification Statement
- 6. Adjacent Property Owner Notification Letter

# **Appendix A.1. Example Public Notice**

#### **PUBLIC NOTICE**

As required by § 9 VAC 20-81-450.B.4. and §10.1-1408.1.B.4., the {Facility Name} announces a public meeting to show its intent to apply for a permit to operate a {sanitary landfill or transfer station}, and to receive comments and questions on the proposed siting and operation of the facility. The proposed site is located in {indicate local government district}, {provide location description with reference to nearby landmarks, major interstates or routes, etc. \}. The latitude and longitude of the site is {provide lat/long coordinates}. The proposed facility consists of portions or all of the following tax parcels: {indicate tax map parcels}. A public meeting will be held on {date, time} at the {public} hearing location and address (provide location description if necessary). More detailed information regarding the location of the public hearing facility may be obtained from {provide contact name and phone number and/or email address}. Interested persons may contact {owner contact, company name, phone number and/or email address} with questions or comments regarding the proposed application. Written correspondence may be send {owner contact, address}. Interested parties may also access available information {state location where copies of planning documents are available, whether on the internet, local government office, public library, and/or company business office}.

#### **Appendix A.2. Reservation of Disposal Capacity**

#### **NOTIFICATION LETTER:**

Date

Contact Name Locality Administrator Address Town, VA ZIP

Dear Contact name:

Applicant plans to construct and operate a municipal solid waste management facility in County/City/Town/Place. Pursuant to Virginia Code 1408.1.B.6, you may reserve disposal capacity in this landfill up to the requirements specified in your approved solid waste management plan. By signing the agreement below, the applicant agrees to guarantee the facility will reserve the requested disposal capacity for the locality. The applicant and locality must sign a contract that stipulates the conditions of the agreement. By signing the denial statement, the locality agrees that it does not wish to reserve disposal capacity. If the acceptance agreement is not returned within 60 days from the date of this letter, it will be assumed that the locality has refused the offer to reserve disposal capacity.

Sincerely,

Contact Name Applicant Address Town, VA ZIP

# AGREEMENT TO ACCEPT:

On behalf of, the undersigned hereby addisposal capacity in the planned facility. The locality disposal needs and has concluded it requires undesigned understands that by accepting this offer a contract that stipulates the conditions of the agree enforceable agreement to guarantee future disposal	ty has fully investigated its future solid waste cubic yards of reserve capacity. The , <i>the locality</i> and the <i>applicant</i> must enter into ment. The acceptance letter will constitute an
Signed:	Date
Title and investing Authority	
Contact Information	<del></del>
STATEMENT OF DENIAL	
On behalf of, the undersigned decl the planned facility. The undersigned agrees that by made a good faith effort to inform the locality of its has fully investigated its solid waste disposal needs needed at this time.	signing this statement, the applicant has right to reserve airspace and that the locality
Signed:	Date
Title and investing Authority	
Contact Information	

#### Appendix B.1. Disposal Capacity Guarantee – Locally Owned/Operated Sanitary Landfill

Pursuant to § 9 VAC 20-81-450.B.5. of the Virginia Solid Waste Management Regulations (VSWMR, 9 VAC 20-81-10 *et seq.*) and § 10.1-1408.1.B.6. of the Code of Virginia, this document constitutes a statement by the applicant, {Owner Name}, that the {Facility Name} will accept only solid waste generated within the regional authority's member jurisdictions that include {Name of the member counties, cities, and towns}.

Signed:	Date
Title and investing Authority	
Contact Information	

#### Appendix B.2. Disposal Capacity Guarantee – Privately Owned Sanitary Landfill

Pursuant to § 9 VAC 20-81-450.B.5. of the Virginia Solid Waste Management Regulations (VSWMR, 9 VAC 20-81-10 *et seq.*) and § 10.1-1408.1.B.6. of the Code of Virginia, this document constitutes a statement by the applicant, {Owner Name} has contacted all localities in Virginia to offer reserve disposal capacity per the respective solid waste management plans.

{If no localities have entered into a contract at the time of this submittal} No localities have entered into a contract with {Owner Name} as a result of the offer. However, the localities will be allowed to enter into a contract in the future if they want to do so.

be allowed to enter into a contract in the future if they wa	ant to do so.
[If localities have or will be entered into a contract] On agreed to the offer. The total reserve disposal capacity for cubic yards. By agreeing to this offer, the required capacity in the facility by entering into a contract.	or all of the localities on the list below is the applicant guarantees to reserve the
{List localities and reserve capacity in cubic yards}	
Signed:	Date
Title and investing Authority	
Contact Information	

# Appendix C.1.a. Key Map

# **Appendix C.1.b. Near Vicinity Map**

# **Appendix C.1.c. Regional Map**

# **Appendix C.2.a. Suggested Laboratory Methods**

SAMPLE ORIGIN	PARAMETER	METHOD	DETERMINES
Geologic formation, unconsolidated sediments, consolidated sediments, solum	Hydraulic Conductivity	Falling head, static head tests	Hydraulic conductivity
	Size Fraction	Sieving (ASTM)	Hydraulic conductivity
		Settling Measurements (ASTM)	Hydraulic conductivity
	Sorting	Petrographic Analysis	Porosity
		Column Drawings	
	Specific yield	Centrifuge Tests	Porosity
	Specific retention	Petrographic analysis	Soil type, rock type
	Petrology /pedology	X-ray diffraction	
	Mineralogy	confining clay mineralogy/chemistry	Geochemistry, potential flow paths
		Petrographic analysis	
	Bedding	Petrographic analysis	
		ASTM	
	Laminations		Soil cohesiveness
	Atterberg limits		Soft collesiveness
Contaminated samples (e.g, soils producing higher than background organic readings)	Appropriate subset of Appendix 5-1 parameters	SW-846	Identity of contaminants

# Appendix C.2.b. Geologic Map Example

# Appendix C.2.c. Orthogonal Cross-Section Example

# Appendix C.2.d. Potentiometric Surface Map Example

#### Appendix C.3. VDOT Approval – Sanitary Landfill

VDOT (or County or City, as appropriate) LETTERHEAD

{Date}

{Applicant Address}

RE: VDOT Traffic Adequacy Report

{Facility Name}

Dear {Applicant}:

In accordance with the Code of Virginia, § 10.1-1408.1 D.1. and § 10.1-1408.4 A.1., the VDOT Traffic Adequacy Report dated {date} that was received by this office on {date} has been reviewed. The report accounted for the existing traffic volumes, including the individual/private vehicle drop-offs as well as the traffic volumes that correlate with the proposed daily disposal limit of {daily disposal limit in tons per day} tons per day for the peak hours.

Based on the review it is determined that no improvements are necessary on {Route No. and/or Road Name} or the following improvements are necessary in order to safely handle the projected traffic flow.

{List the improvements required on the Route No. such as right turn lane with taper, left turn lane with taper, stop sign, traffic signals, etc.}

{Closing reparks and contact information of the signatory or designee, in case DEQ has any questions and wants to contact}.

*Signature* 

Name of the Signatory Designation

# <u>Appendix C.4. VDOT Approval – CDD or Industrial Landfill or Other Solid Waste</u> Management Facility

VDOT (or County or City, as appropriate) LETTERHEAD

{Date}

{Applicant Address}

RE: Traffic Impact Evaulation

{Facility Name}

Dear {Applicant}:

In accordance with the Code of Virginia, § 10.1-1408.1 D.1., the Traffic Impact as presented in your letter dated {date} {along with other attachments, if any} that was received by this office on {date} has been reviewed. The letter {and the attachments, if any} accounted for the existing traffic volumes, including the individual/private vehicle drop-offs as well as the traffic volumes that correlate with the proposed daily disposal limit of {daily disposal limit in tons per day} tons per day for the peak hours.

Based on the review it is determined that no improvements are necessary on {Route No. and/or Road Name} or the following improvements are necessary in order to safely handle the projected traffic flow.

{List the improvements required on the Route No. such as right turn lane with taper, left turn lane with taper, stop sign, traffic signals, etc.}

{Closing reparks and contact information of the signatory or designee, in case DEQ has any questions and wants to contact}.

Signature
Name of the Signatory
Designation

#### **Appendix C.5. Adjacent Property Owner Certification Statement**

Pursuant to § 9 VAC 20-81-460.I. of the Virginia Solid Waste Management Regulations (VSWMR, 9 VAC 20-81-10 *et seq.*) this document constitutes a statement by the applicant, {Owner Name}, that written notice has been sent to all owners or occupants of the property adjacent to the {proposed new facility or proposed expansion of the existing facility}. A list of names and addresses of the adjacent property owners or occupants along with a sample copy of the notification letter has been included with this statement.

Signed:	Date
Title and investing Authority	
Contact Information	

#### **Appendix C.6. Adjacent Property Owner Notification Letter**

Adjacent Property Owner/Occupant Address

Subject: Siting a new landfill/expansion of an existing landfill

{Facility Name}, {Permit Number}

In accordance with § 9 VAC 20-81-460.I. of the Virginia Solid Waste Management Regulations (VSWMR, 9 VAC 20-81-10 *et seq.*) this letter is to inform you that {Owner Name}, will be sub mitting a Part A Application to the Virginia Department of Environmental Quality to {site a new landfill/expansion of an existing landfill} located at {physical address of the facility or the intersection}. You have been notified as, according to the county/city/town record, your property is adjacent to the proposed landfill property.

If you have any questions or concerns, please contact me at {phone number and/or email address}.

Signature
Name of the Signatory
Designation